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Steering a changing course

As I wrote in last year's editorial, developmental biology is facing a major revolution with the emergence of the stem cell field, to which many of our best scientists are drawn. Thus, one of my main priorities for 2010 was to raise the profile of *Development* in the stem cell community and to try to make the journal a premier forum for publishing the best stem cell work. To achieve this goal, we have created a new section of the journal called 'Development and stem cells', which groups together papers of interest for the stem cell field. As you might already have noticed, we take a broad perspective on stem cell biology in this section, and have published papers that range from embryonic to adult stem cells, from both animals and plants. Over the course of 2010, we featured at least 75 papers in this section.

We have also expanded our team of editors by recruiting stem cell specialists to increase the visibility of *Development* in the stem cell field. In 2009, we recruited Shin-Ichi Nishikiwa to join our other stem cell experts, Austin Smith and Ben Scheres, on *Development*'s Editorial board. We are also very pleased to announce that *Development*'s editorial stem cell expertise is to be further strengthened by Professor Gordon Keller, currently the director of the McEwen Centre for Regenerative Medicine in Toronto (Canada), who will be joining *Development*'s Editorial board from January 2011. As many of you will already know, Gordon is a world renowned specialist in the field of human and mouse embryonic stem cell differentiation.

Neurodevelopment is another key and expanding area of developmental biology for *Development*, and to strengthen our handling of both neurodevelopment and neural stem cell research, we are delighted to have recently recruited to *Development*'s editorial team Professor Magdalena Goetz from the Institute of Stem Cell Research in Munich (Germany). Magdalena is well known for her discovery that the brain's glial cells not only support cells but also act as stem cells from which neural cells can develop. Magdalena strengthens and expands *Development*'s editorial expertise in stem cell biology, while also extending our expertise in neurodevelopment, complementing the experience and knowledge of our other neurodevelopment editors, Alex Joyner and Steve Wilson.

I also believe that major breakthroughs in our field will come from systems biology, particularly from the introduction of physics-based approaches and concepts in our analysis of development. Thus, another of my goals has been to open the journal to the systems biology community. This endeavour has met with early success; we have been delighted to see some key members of the systems biology community, such as Eric Siggia, send some of their best work to *Development*. The various *Development* editors that handle such papers, including Thomas Lecuit, Rong Li and myself, have recently found it easier to find good referees to advise us on these papers, referees who have the necessary expertise in both developmental biology and mathematics. This is probably because more and more scientists from other non-biological backgrounds, such as physics, are joining this emerging field. This year, we have published some excellent papers in this field, covering a broad variety of topics, from the analysis of mechanical properties (Varner et al., 2010) to in silico evolution (François and Siggia, 2010), and to modelling DNA-target recognition (Scialdone and Nicodemi, 2010). Although some of these papers might make for a challenging read, we do encourage their authors to write them in the most accessible way. However, it remains true that while the systems biologists need to make their work intelligible to development biologists, development biologists also need to learn and master some of the key concepts and methods (often borrowed from mathematics and physics) used in this new field. We hope that the recent reviews by Eric Wieschaus and co-authors (Grimm et al., 2010), and by Ilaria Rebay and colleagues (Graham et al., 2010) on the modelling of two important developmental processes (morphogen gradient formation and cell fate choice, respectively) will also assist the community in this endeavour.

Another priority for 2010 has been to expand our coverage of the evolutionary developmental (Evo-Devo) field; to achieve this we recruited Nipam Patel as our new Evo-Devo editor in 2009. Last year, several outstanding papers on the development of interesting non-model organisms were published in the journal (Sagane et al., 2010; Lemke et al., 2010; Vargas-Vila et al., 2010), as well as the first article in our new Primer series (called the Evolutionary crossroads in developmental biology series) on the Moss *Physcomitrella patens* (Prigge and Bezanilla, 2010). These primers will focus on those organisms that are particularly informative for the study of evolutionary developmental biology.

Before I became the Editor in Chief of *Development*, one aspect of the journal's reputation that I always liked and valued was its community ethos. As you'll no doubt already know, *Development* is a not-for-profit journal that is published by The Company of Biologists (CoB), a charitable organization that is run by biologists. Community support is a vital aspect of *Development*'s and of CoB's charitable remit. A very important achievement for our online community building in 2010 was the launch of the Node (http://thenode.biologists.com/), a free to all and not-for-profit community website for developmental biologists that has at its heart an open community blog. Since its launch in June 2010, the Node has featured numerous posts on community news from community members and from Eva Amsen, the Node's dedicated community manager, across a range of topics. Some of the most popular posts, by way of hits and comments, have been those from *Development*'s own Travelling Fellows – young researchers whom *Development* assists through its Travelling Fellowship program (see http://dev.biologists.org/site/misc/fellowships.xhtml) to visit a new lab, often in another country, to carry out a collaborative project. In one such post, a Chilean Travelling Fellow describes his experience of arriving at his host lab in Germany just days before his own lab in Chile was hit by a devastating earthquake (see http://thenode.biologists.com/developing-science-in-a-far-country-the-paradoxes-of-life/). These posts on the Node illustrate, for me, why *Development* has such a strong reputation for being a community journal. If you've not already visited the Node, could I take this opportunity to encourage you to do so? If you like what you read, why not give it a thumbs up, and if you feel inspired to share a thought or a comment, go ahead and join in with a discussion – anyone can comment, no registration is required. If you think you'll become

a regular contributor, then registration is required to post but the process is quick and easy (see http://thenode.biologists.com/help/ for more information).

Directions for the future

One significant change to the journal for 2011 is that Iva Greenwald, our highly experienced and long standing *C. elegans* editor, is standing down from *Development*'s editorial board after 10 years of service as an Editor. I'd like to take this opportunity to warmly acknowledge and to thank Iva for her years of dedication and service to the journal. Iva has been a superb advocate for the worm community and for *C. elegans* research in her years as a *Development* editor. Her dedication and experience will be very much missed by both her fellow editors and *Development*'s staff, and no doubt by the many authors whose papers she had shepherded through the publication process.

We are extremely fortunate and delighted, therefore, to have Professor Geraldine Seydoux, from the Howard Hughes Medical Institute and Johns Hopkins University School of Medicine (Baltimore, MD, USA), join *Development* as our new *C. elegans* editor. Geraldine is best known for her work on germline specification in *C. elegans*. She is particularly interested in the early critical decisions that determine whether cells become somatic body cells or germline cells.

If you came to this editorial via this issue's table of contents, you may have already noticed one of our other key developments for 2011: our new Technical paper category. We are introducing this section because we believe that papers that describe a novel technique of broad interest to the community of developmental biologists are relevant to the readers of *Development*. Thus, we plan to publish in this new section both research articles and research reports describing new methods that provide a significant new resource to the developmental biology community. We expect papers in this section to describe the method and its particular application to a developmental biology problem. For more information on our guidelines on technical papers, please see our publication criteria page online at http://dev.biologists.org/site/submissions/pub_criteria.xhtml.

Thus, there have been many changes to *Development* over the course of the past year, and also no doubt in the year to come: in 2010, we launched our newly redesigned website, as well as the Node, and placed a strong emphasis on new research directions, among them stem cell and systems biology. These changes are essentially meant to adapt *Development* to an evolving developmental biology field. It is our hope that they will help to maintain the leading position of *Development* in the field. I thank all of the *Development* authors this year for their support. I also thank the Editors for their hard work in 2010, and for their assistance with steering the journal through this period of change. Very special thanks are due to Jane Alfred, our Executive Editor, as well as to the *Development* staff in Cambridge, for their superb dedication during this very busy year.

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